EXHIBIT 21

DECLARATION OF SALLY MORTON

I, Sally Morton, hereby declare:

- 1. I am a resident of the State of Arizona. I am currently employed by Arizona State University as Executive Vice President of the ASU Knowledge Enterprise and as a Professor in the College of Mathematical and Statistical Sciences and the College of Health Solutions. In my capacity as Executive Vice President, I lead the university's research and economic development portfolio to advance research priorities, oversee ASU's research institutes and initiatives, and drive corporate engagement, strategic partnerships, intellectual property, and technology transfer.
- 2. As Executive Vice President of the ASU Knowledge Enterprise, I have personal knowledge of the matters set forth below, or have knowledge of the matters based on my review of information and records provided to me by ASU employees and believe that information to be true. If called as a witness, I could and would testify competently to the matters set forth below.
- 3. I am providing this declaration to explain certain impacts of the Department of Energy (DOE)'s announced plan to immediately reduce facilities and administrative costs payments (also known as indirect costs) to 15% for both ongoing and future grants.
- 4. ASU is a comprehensive public research university committed to advancing research and discovery of public value. ASU is one of the fastest-growing research enterprises in the United States, with total research expenditures of \$904 Million in its fiscal year ending June 30, 2023 as reported on the NSF HERD survey.
- 5. Sponsored funding from federal agencies constitutes a significant portion of ASU's annual research expenditures. In its fiscal year ending June 30, 2024, ASU expended

- \$508 Million received from federal agencies to conduct research work under approved agreements (grants, contracts, and cooperative agreements).
- 6. ASU receives sponsored funding from at least 23 different federal agencies, including DOE.
- 7. ASU has a Negotiated Indirect Cost Rate Agreement with the federal government applicable to all of its federal awards. Ex. A.
- 8. The indirect cost rate in ASU's Negotiated Indirect Cost Rate Agreement is 57% for oncampus research. Because certain direct cost categories are exempted from calculating indirect costs, ASU's overall effective indirect cost rate across all sponsors is approximately 35%.
- In federal fiscal year 2024, ASU received over 55 awards from DOE, totaling over \$98 million in anticipated funding.
- 10. One such award is the Ultra-Wide Bandgap (UWBG) Semiconductor EFRC project, advancing a "substation in a suitcase" concept by making power conversion and control devices dramatically smaller, more efficient, and more reliable key steps for U.S. competitiveness. This breakthrough ASU research supports national security by strengthening grid resilience and ensures economic prosperity through job creation and reduced energy costs for businesses and consumers.
- 11. Having completed roughly one-third of its four-year plan, the project has made critical progress toward understanding high-field transport, defect control, and thermal management in UWBG materials. Losing the remaining funds would severely jeopardize these advancements, risking important benefits for the nation's energy infrastructure, grid security, and global leadership in power electronics.

- 12. This kind of cutting-edge research relies on specialized laboratories, equipment, and expertise that are typically found only at advanced research institutions like Arizona State University. For instance, large-scale cleanroom facilities are essential for fabricating and testing UWBG semiconductor devices, and they must meet stringent environmental conditions to minimize contamination. Similarly, sophisticated growth equipment such as molecular beam epitaxy (MBE) and metal-organic chemical vapor deposition (MOCVD) systems require expertly trained personnel to maintain, operate, and interpret data. characterization methods—like Moreover, high-resolution advanced microscopy, X-ray diffraction, and scanning probe techniques—are housed in wellequipped, interdisciplinary facilities that can support multiple projects simultaneously. These institutions also have extensive computational infrastructure and software resources, enabling accurate simulation of material properties and guiding experimental design. Altogether, this comprehensive ecosystem of state-of-the-art equipment, specialized facilities, and technical support, coupled with an active community of researchers, is critical for pushing the boundaries of UWBG semiconductor research and delivering transformative breakthroughs.
- 13. Recovering indirect costs of research is essential to sustaining the university's research infrastructure generally, including the specific infrastructure needed to perform the university's current grant agreements with DOE. Indirect cost funding pays for critical expenses that keep research programs operational. These include the costs of operating physical research facilities, such as electricity, water, and utilities; the acquisition and maintenance of specialized research equipment utilized for multiple projects; and personnel costs for employees who directly support research operations, such as those

who are engaged in environmental health and safety, animal care, data management, and grant compliance. Many of these compliance tasks relate to regulatory mandates from DOE, including ensuring research integrity, properly managing and disposing of chemical and biological agents used in research, providing the secure computing environments mandated for regulated data, and preventing intellectual property and national security expertise from being inappropriately accessed by foreign adversaries.

- 14. For example, the Ultra-Wide Bandgap (UWBG) Semiconductor EFRC project discussed above relies on specialized equipment for both synthesizing UWBG semiconductors and analyzing their properties at the microscopic and atomic levels. High-end growth reactors like molecular beam epitaxy (MBE) or metal-organic chemical vapor deposition (MOCVD) systems are crucial to precisely control material composition and quality. Advanced imaging and analytical tools such as transmission electron microscopes (TEMs), scanning electron microscopes (SEMs), and various spectroscopic systems enable researchers to visualize defects and interfaces, as well as quantify doping and impurities. State-of-the-art electrical and thermal characterization equipment is also necessary to measure how these materials perform under extreme voltages, currents, and temperatures. Finally, powerful computational resources and software platforms assist in simulating and interpreting the fundamental properties of UWBG materials, helping to guide experiments and optimize device designs.
- 15. The DOE announcement, if implemented, immediately reduces millions of dollars in indirect cost recovery that ASU believed would be available to it when it entered into its grant agreements with DOE. The university made personnel and operational plans and decisions, and entered into employment and other contracts, in reliance on that

understanding. The reduction of DOE indirect cost recovery by more than half jeopardizes the university's ability to conduct not only the research work contemplated by its agreement with DOE but other research work that the shared facilities and personnel paid for through indirect cost funds support.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed this 13th day of April, 2025, in Phoenix, Arizona.

Sally Morton

Executive Vice President of the Arizona State University Knowledge Enterprise

COLLEGES AND UNIVERSITIES RATE AGREEMENT

EIN: Date: 07/30/2024

ORGANIZATION: FILING REF.: The preceding

Arizona State University agreement was dated

Fulton Center 410, Rm. 4478 05/24/2023

P.O. Box 87705

Tempe, AZ 85287-7605

The rates approved in this agreement are for use on grants, contracts and other agreements with the Federal Government, subject to the conditions in Section III.

SECTION I: INDIRECT COST RATES

	EFFECTIVE PERIOD					
TYPE	<u>FROM</u>	<u>TO</u>	RATE(%)	LOCATION	APPLICABLE TO	
PRED.	07/01/2020	06/30/2023	57.00	On-Campus	Organized Research	
PRED.	07/01/2020	06/30/2023	26.00	Off-Campus	Organized Research	
PRED.	07/01/2020	06/30/2023	48.00	On-Campus	Instruction	
PRED.	07/01/2020	06/30/2023	26.00	Off-Campus	Instruction	
PRED.	07/01/2020	06/30/2023	44.40	On-Campus	Other Sponsored Activities	
PRED.	07/01/2020	06/30/2023	26.00	Off-Campus	Other Sponsored Activities	
PROV.	07/01/2023	Until Amended	l	(1)		

*BASE

Modified total direct costs, consisting of all salaries and wages, fringe benefits, materials, supplies, services, travel and subgrants and subcontracts up to the first \$25,000 of each subgrant or subcontract (regardless of the period covered by the subgrant or subcontract). Modified total direct costs shall exclude equipment, capital expenditures, charges for patient care, participant support costs, student tuition remission, rental costs of off-site facilities, scholarships, and fellowships as well as the portion of each subgrant and subcontract in excess of \$25,000.

(1) Use same rates and conditions as those cited for fiscal year ending June 30, 2023.

ORGANIZATION: Arizona State University

AGREEMENT DATE: 07/30/2024

SECTION I: FRINGE BENEFIT RATES**

TYPE	FROM	<u>TO</u>	RATE(%)	LOCATION	APPLICABLE TO
FIXED	7/1/2024	6/30/2025	30.40	All (A)	Faculty
FIXED	7/1/2024	6/30/2025	36.80	All (A)	Staff
FIXED	7/1/2024	6/30/2025	10.90	All (A)	Part Time
FIXED	7/1/2024	6/30/2025	1.20	All (A)	Students
FIXED	7/1/2024	6/30/2025	8.50	All (A)	RA/TA
FIXED	7/1/2024	6/30/2025	25.30	All (A)	Post Doc
PROV.	7/1/2025	Until Amended			Use same rates and conditions as those cited for fiscal year ending June 30, 2025.

** DESCRIPTION OF FRINGE BENEFITS RATE BASE:

(A) Salaries and wages including vacation, holiday, sick leave pay and other paid absences.

ORGANIZATION: Arizona State University

AGREEMENT DATE: 07/30/2024

SECTION II: SPECIAL REMARKS

TREATMENT OF FRINGE BENEFITS:

The fringe benefits are charged using the rate(s) listed in the Fringe Benefits Section of this Agreement. The fringe benefits included in the rate(s) are listed below.

TREATMENT OF PAID ABSENCES:

Vacation, holiday, sick leave pay and other paid absences are included in salaries and wages and are claimed on grants, contracts and other agreements as part of the normal costs for salaries and wages. Separate claims for the costs of these paid absences are not made except for paid absences that have been earned but not taken when an individual separates from the university prior to the completion of the grant, contract or other agreement.

OFF-CAMPUS DEFINITION

An off-campus rate is applicable to those projects conducted in facilities not owned or operated by the University, which include charges for facility rental as a direct expenditure, and for which more than 50% of the project salaries and wages are for effort conducted in the rental facility.

DEFINITION OF EQUIPMENT

Equipment means tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds \$5,000.

The following fringe benefits are included in the fringe benefit rate(s):

FICA, WORKERS COMPENSATION, HEALTH/DENTAL/LIFE INSURANCE, UNEMPLOYMENT INSURANCE, DISABILITY INSURANCE, ACCIDENTAL DEATH, RETIREMENT PLANS (STATE RETIREMENT PROGRAMS AND TIAA/CREF), FLEXIBLE SPENDING PLAN, RETIREE ACCUMULATIVE SICK LEAVE, AND EMPLOYEE TUITION REMISSION, EMPLOYEE WELLNESS, SABBATICAL PAYMENTS, EMPLOYEE ASSISTANCE, AND TERMINAL LEAVE.

This agreement updates fringe benefits only.

NEXT PROPOSAL DUE DATE

Your next indirect cost based on actual costs for 06/30/22 is in-house for review, and fringe benefits proposal based on actual costs for FYE 06/30/24 is due by 12/31/24.

ORGANIZATION: Arizona State University

AGREEMENT DATE: 07/30/2024

SECTION III: GENERAL

A. <u>LIMITATIONS:</u>

The rates in this Agreement are subject to any statutory or administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the organization were included in its indirect cost pool as finally accepted: such costs are legal obligations of the organization and are allowable under the governing cost principles; (2) The same costs that have been treated as indirect costs are not claimed as direct costs; (3) Similar types of costs have been accorded consistent accounting treatment; and (4) The information provided by the organization which was used to establish the rates is not later found to be materially incomplete or inaccurate by the Federal Government. In such situations the rate(s) would be subject to renegotiation at the discretion of the Federal Government.

B. **ACCOUNTING CHANGES**:

This Agreement is based on the accounting system purported by the organization to be in effect during the Agreement period. Changes to the method of accounting for costs which affect the amount of reimbursement resulting from the use of this Agreement require prior approval of the authorized representative of the cognizant agency. Such changes include, but are not limited to, changes in the charging of a particular type of cost from indirect to direct. Failure to obtain approval may result in cost disallowances.

C. FIXED RATES:

If a fixed rate is in this Agreement, it is based on an estimate of the costs for the period covered by the rate. When the actual costs for this period are determined, an adjustment will be made to a rate of a future year(s) to compensate for the difference between the costs used to establish the fixed rate and actual costs.

D. <u>USE BY OTHER FEDERAL AGENCIES:</u>

The rates in this Agreement were approved in accordance with the authority in Title 2 of the Code of Federal Regulations, Part 200 (2 CFR 200), and should be applied to grants, contracts and other agreements covered by 2 CFR 200, subject to any limitations in A above. The organization may provide copies of the Agreement to other Federal Agencies to give them early notification of the Agreement.

E. OTHER:

If any Federal contract, grant or other agreement is reimbursing indirect costs by a means other than the approved rate(s) in this Agreement, the organization should (1) credit such costs to the affected programs, and (2) apply the approved rate(s) to the appropriate base to identify the proper amount of indirect costs allocable to these programs.

BY THE INSTITUTION:	ON BEHALF OF THE GOVERNMENT:		
Arizona State University	DEPARTMENT OF HEALTH AND HUMAN SERVICES		
(INSTITUTION) Matthew Smith	(AGENCY) Arif M. Karim -S Digitally signed by Arif M. Karim -S Date: 2024.08.01 09:25:04 -05'00'		
(SIGNATURE)	(SIGNATURE)		
Matthew J. Smith	Arif Karim		
(NAME)	(NAME)		
VP for Budget Planning & Management	Director, Cost Allocation Services		
(TITLE)	(TITLE)		
08/15/2024	07/30/2024		
(DATE)	(DATE)		
	HHS REPRESENTATIVE: Jeanette Lu		
	TELEPHONE: (415) 437–7820		